

I have recorded these notes with some diffidence. The zoological records of a country if they are to exist at all must have a beginning, even though that beginning be a modest one. Chitral offers an interesting field for zoological research, and it will be seen from the above notes how little has as yet been done in this direction.

The existence of monkeys, marmots, musk deer, shapu, Himalayan snow cock, and (I think we may add) jungle-fowl in Chitral is interesting, as no record appears to have been as yet made of these animals so far West.

II.—*Notes on the Fauna of Dir and Swat.*—By CAPTAIN A. H. McMAHON,
C.S.I., C.I.E., F.Z.S. *Political Agent, Dir, Swat and Chitral.*

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On previous occasions I have, in the case of the Gilgit and Chitral Districts, placed on record a few notes on the Fauna of those countries, in the hope that though scanty in themselves they might be of interest in adding to our existing knowledge of the distribution of various forms of animal life.

I propose here to do the same with regard to the country of Dir and Swat, and to record such few observations on the Zoology of these countries as circumstances have allowed me to make during my stay (1899, 1900, 1901), in the Dir, Swat, and Chitral agency. Nothing as far as I know has ever been recorded in the matter of Zoology regarding these countries before. My notes therefore must be taken as a modest endeavour to make a commencement of the complete Zoological records which it is to be hoped will be made of these countries hereafter by more capable hands.

Inability to move freely about this unsettled country and press of work have prevented my observations being of anything like an extensive nature. The greater portion of the country is as yet unvisited by Europeans, and a wide field of interesting zoological research remains untouched.

The countries of Dir and Swat are treated here as one. They represent the drainage areas of the Panjkora and Swat rivers respectively as far as their junction. Both rivers take their rise within a short distance of each other in the lofty mountain range which forms the southern boundary of Chitral. The peaks of this range vary in height, decreasing from some 23,000 ft. on the N.-E. end to 15,000 ft. or so on the S.-W. end of the range.

The upper portions of the head valleys of both the Swat and Panjkora rivers resemble in most respects the valleys which on the north side of the range form part of Chitral. It is to be expected therefore that their fauna much resemble that of corresponding tracts in Chitral.

The remainder and the greater part of the Dir and Swat countries are at a much lower elevation than that of Chitral. Both are mountainous, but each successive mountain range, as one proceeds southwards, becomes lower and lower, until at the southern edge of the country the highest peaks attain to no more than 6,000 ft., while the main valleys gradually descend to an elevation of only some 2,000 ft. Both the upper and lower portions of the Dir and Swat countries differ in one respect from Chitral, in that the annual rainfall is very much greater. This has resulted in clothing the hill sides of the upper valleys with wide deodar forests, and in thickly covering the lower slopes with pine, oak and other small trees. The lower valleys are wide expanses of alluvial land of great fertility.

As might be expected, the fauna of the country is very rich and varied. How little we yet know of it will be seen by the scantiness of these notes.

Mammalia.—On the northern fringe of Swat where the watershed of the Swat river is also the watershed of some of the upper Chitral valleys, the ibex (*Capra sibirica*) is reported. These I think are only visitors from the Chitral side. Ibex is not found in Upper Dir.

Markhor.—(*Capra falconeri*). A few of the Pir Punjab variety with gracefully curved horns (Fig. 165 of Blandford's Fauna of India, Vol. Mammalia) are to be found on the range which separates Dir from Chitral, and Asmar. I do not know if any exist in Upper Swat or Swat Kohistan, but one might expect to find them there.

Further south in the range of hills which separate Swat from Boner and the Peshawar plain, the Cabul variety with almost straight horns and a slight spiral are found.

Orials.—*Ovis vignei* exist but in small numbers in the Southern borders of Swat. They are of the Punjab variety, *Ovis vignei* proper, and I have not heard of the existence in Dir and Swat of the *Ovis cycloceros* or Shapu variety. It is doubtless to be found however in Swat Kohistan which lies between Chitral and Chilas both possessing this variety.

Goral.—*Cervus goral* has been seen in the Lower Swat valley, where one was caught alive while being swept down the Swat river in a flood, and also on the hills above Malakand. The existence of this

animal is interesting, as it does not appear ever to have been before reported west of the Indus.

Musk Deer.—*Moschus moschiferus* is reported to be numerous in the upper portions of Dir.

Bears.—The Brown Bear, *Ursus arctus*, has never been reported in Dir or Swat.

The Black bear, *Ursus torquatus*, is very common all over Dir and Swat, even as far south as the range separating Swat from the Peshawar valley.

Leopards.—The existence of snow leopard (*Felis uncia*) has never been reported, but I feel sure it is to be found in Swat Kohistan. The common leopard, *Felis pardus*, is very plentiful throughout Dir and Swat.

Monkeys.—It is somewhat surprising to find that monkeys are fairly common throughout most parts of Dir and Swat. I have seen several live specimens that have been brought in from Dir, and a large herd of monkeys has been lately seen on the slopes of the Bar Chanrai hill on the north side of the Lower Swat valley opposite Malakand. I have been unable to satisfy myself about the identity of this monkey. It appears to be of the same kind as specimens which I have seen in Chitral. I have only seen live specimens of animals of both countries. These strongly resented the close examination which is necessary for identification. In general characteristics they would appear to resemble either *Macacus rhesus* or *Macacus assamensis*, but their tails, which in adults are about 8 inches in length, are not tapering but come to an abrupt end as though cut off, like a fox terrier's tail. I hope to be able to send a specimen of this monkey to the Indian Museum, Calcutta, for classification.

I should note that the existence of monkeys has been also reported to me as having been met by officers while out after markhor in the Pajja hill north of Mardan.

Among other common mammals in Lower Dir and Swat are the hyæna, jackal, fox, wolf, pig, hare, porcupine (*Hystrix leucura*) and hedgehog.

Reptilia or *Batrachia*.—Regarding these my observations have been confined to the immediate neighbourhood of Malakand and the Lower Swat valley between Chakdara and Malakand. Both snakes and lizards are numerous in the above area, but I have devoted my attention chiefly to the former, of which I have examined a large number of specimens.

Ophidia.—Though snakes are numerous, they seem all to belong to but very few species. By far the commonest genus of snake in this

tract appears to be the *Zamenis* which is therein represented by the following species.

Zamenis diadema.—This is very common, and the specimens obtained average between 5 to 6 ft. in length. One specimen killed had just swallowed a large rat. The peculiarity about most specimens is the bright red colour of their heads. I have noticed this elsewhere on the N.-W. frontier.

Zamenis mucosus.—Also common. Several very large specimens were sent me from Mardan. This snake, both in Mardan and here, is very dark coloured, and curiously resembles the black form of cobra. I have been more than once taken in by this resemblance. It is very common in the Guides' grass farm at Mardan, where it is the terror of the grass cutters. It adds to its similarity to a cobra by inflating out its neck into some resemblance to a cobra's hood—and assuming a most threatening aspect.

Zamenis ladacensis.—Very common. I also obtained specimens of this snake with a bright vermilion line down the centre of its back. I understand that this variety used to be considered a separate one under the name *Zamenis rhodorachis*. This peculiar and very conspicuous colouring would almost appear to entitle it to retain a separate name.

Zamenis ventrimaculatus.—Not so common as the preceding species.

Next to the *Zamenis* comes in point of numbers of specimens obtained, the *Echis carinatus*, which is plentiful everywhere. It is possible that it is in reality far more numerous than the *Zamenis*, but escapes detection by its protective colouring and smaller size. This is the only species of the *Viperidæ* that has come to my notice in this country.

Naja tripudians.—I have only obtained a few specimens of the cobra in this country. It does not appear to be numerous. Those obtained have all been of the black variety.

Bungarus cæruleus.—Only one specimen of the karait obtained, and that in Malakand itself.

Tropidonotus piscator.—Common in the Swat valley; one large specimen was found to have 18 large developed eggs inside it.

Tropidonatus stolatus.—One specimen.

I have subsequently obtained another specimen, which I sent alive to the Indian Museum, where I called Major Alcock's attention to its colouring. The vivid light yellow colour of the centre portion of each cross band down the length of its back has not been brought to notice before.

Lycodon striatus.—One specimen which I sent to the Indian Museum, Calcutta, where it was identified by Major Alcock.

Gongylophis conicus.—I obtained several specimens of this curious snake.

Contia angusticeps.—This snake deserves some remark. I obtained eleven specimens of it at Malakand and was unable to identify it. Major Alcock, Superintendent, Indian Museum, Calcutta, to whom I sent specimens, was also unable to identify it with any known species, and it was sent to the British Natural History Museum, where Mr. Boulenger has identified it as the above, i.e., *Contia angusticeps*, of which only one specimen appears to have been previously found.

Ophidia.—Continued.

Oligodon subgriseus.—One specimen.

Typhlops braminus.—Two specimens, which I sent alive to the Indian Museum, Calcutta.

Glauconia blanfordii.—I obtained one specimen, which I sent alive to the Indian Museum, Calcutta. It unfortunately escaped before being definitely identified. Major Alcock says he thinks it was the above species.

Lacertilia.—Notwithstanding the number of Lizards in the country, I regret having been unable to devote attention to them. The only specimens examined by me, have been as follows;—

Varanus flavescens.—This is very common and attains a length of about 3 feet.

Varanus bengalensis.—Common.

Gymnodactylus scaber. One specimen identified as above by Major Alcock.

Calotes versicolor.

Eublepharis macularius.—One specimen identified by Major Alcock. The colouring of this specimen in life deserves notice. The transverse bands were jet black and bright yellow with a faint subshade of pink.

BIRDS.—The Dir and Swat countries are rich in varied and numerous kinds of birds, both visitors and permanent residents. A careful study of them would doubtless prove of great interest. Among the few specimens examined by me are the following.

Rallus aquaticus ♀.—Water Rail. Differs from the type given in Fauna of India (Birds, Vol. IV), in having the ashy-grey of the breast slightly (though very slightly) washed with brown. Its length is 12 inches, instead of 11 inches as in the type.

Otis tetrax.—Little Bustard. Two specimens obtained in winter between Malakand and Mardan.

Cygnus olor.—Mute Swan. One live but wounded specimen brought in March, 1900, by a man who said he had shot it with three others at the mouth of the Swat river at Abazai.

Lophophorus refulgens.—The Monal Pheasant is fairly common in the higher and wooded slopes of all the Dir and Swat valleys. It appears to suffer from snow blindness, and is easily caught at such times. Several live specimens have been brought to me from Dir, and one from near Thana in Lower Swat.

Circus cyaneus.—Hen Harrier. One specimen obtained from the edge of the Peshawar plain, November, 1900.

Duck and teal of many kinds pass through Swat and Dir on their way to and from India in the autumn and spring. Quail and snipe also pass through. I have never heard of Sand Grouse having been seen.

The Chickor and Scarse are permanent residents and very common. So also are the Grey and Black Partridges. The Black Partridge only frequent the lower ends of the valleys. The Grey extend further up the valleys.

Pisces.—The Panjkora and Swat rivers are full of fish, chiefly of the kind commonly known as Snow Trout, which would appear to be a species of *Cyprininæ*.

Mahaseer (*Barbus tor*) ascend both rivers in considerable numbers in the spring, but very few remain during the winter, as they nearly all descend again to the Cabul river in the late autumn. Mahaseer up to 30 lbs. have been obtained in the lower reaches of the Panjkora and Swat rivers.

III.—*Note on the Butterflies comprised in the subgenus Tronga of the genus Euplœa*.—By LIONEL DE NICÉVILLE, F.E.S., C.M.Z.S., &c.

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In the Proceedings of the Asiatic Society of Bengal, 1892, pp. 158-161, will be found a note by me on the Indian and Malayan Peninsula Butterflies of the subgenus *Stictoplœa* of the genus *Euplœa*. In the Trans. Ent. Soc. Lond., 1892, pp. 247-248, is practically a *resumé* of this paper. In the Journal of the Asiatic Society of Bengal, vol. lxi, pt. 2, pp. 237-245 (1892), I gave a note on the subgenus *Pademna* of the genus *Euplœa*. In the present paper I propose to deal with the subgenus *Tronga* of the genus *Euplœa*. I am driven to do so by the circumstance that Mr. Robert Shelford, Curator of the Sarawak Museum, Borneo, has from time to time sent me large numbers of *Trongas*, imploring me to name them for him, as he is unable to do so from Dr. F. Moore's paper on the *Euplœina* in the Proceedings of the Zoological Society of London for 1883, pp. 253-324, in which six